

Notice of Allowability

Application No.

10/677,258

Examiner

Tammy Pham

Applicant(s)

YAHAGI ET AL.

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/3/2003.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Drawings

Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The drawings nor the specifications do not point out and number the first and second discharge gap/cell. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

Claims 1-28 are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1-15 are allowable because prior art fails to teach or suggest, either alone or in combination, a system and method for displaying an image according to pixel data of every pixel based on an input image signal, comprising:

- Each of the light-emission areas consisting of a first discharge cell including a portion where the respective row electrodes in pair are opposed to each other with a first discharge gap in the discharge space and a second discharge cell including a portion where a light absorptive layer is provided on the front substrate's side and one row electrode of the row electrode pair and the other row electrode of the row electrode pair adjacent to the above row electrode pair are opposed to each other with a second discharge gap
- An address component for producing an address discharge within the second discharge cell selectively by applying a pixel data pulse based on the pixel data, to the respective column electrodes, while applying a scanning pulse to a row electrode having the longer distance to the first discharge cell, of the respective row electrodes within the second discharge cell, thereby setting the second discharge cell at a light-on state or a light-off state.

Claims 16-28 are allowable because prior art fails to teach or suggest, either alone or in combination, a system and method for displaying an image according to pixel data of every pixel based on an input image signal, comprising:

- Each of the light-emission areas consisting of a first discharge cell including a portion where the respective row electrodes in pair are opposed to each other with a first discharge gap in the discharge space and a second discharge cell including a portion where a light absorptive layer is provided on the front substrate's side and one row electrode of the row electrode pair and the other row electrode of the row electrode pair adjacent to the above row electrode pair are opposed to each other with a second discharge gap
- An address component for producing an address discharge within the second discharge cell selectively by applying a pixel data pulse based on the pixel data, to the respective column electrodes, while applying a scanning pulse to a row electrode having the longer distance to the first discharge cell, of the respective row electrodes within the second discharge cell, thereby setting the second discharge cell at a light-on state or a light-off state.
- A priming expansion stage for expanding a discharge toward the first discharge cell to set the first discharge cell at a light-on state, by applying a priming pulse alternately to the respective row electrodes within the second discharge cell to cause a priming discharge only in the second discharge cell that is in the light-on state;
- A sustain stage for repeatedly applying a sustain pulse alternately to the respective row electrodes within the first discharge cell to cause a sustain discharge only in the first discharge cell that is in the light-on state.

Prior art does disclose similar art although not entirely as claimed.

Hashimoto et al (US Patent No: 6,603,263 B1) teaches of multiple discharge cells but dose not teach applying the pixel data pulse as specified in claim 1.

Lim (US Patent No: 6,608,611 B2) teaches of driving a plasma display with an auxiliary discharge that is used largely to shorten the discharge delay time but dose not teach applying the pixel data pulse as specified in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tammy Pham
February 15, 2006



KENT CHANG
PRIMARY EXAMINER